WHAT IS CLAIMED IS:

SUB A'

1. A method of allocating resources on a network, comprising:

receiving a request for reservation of network resources, the reservation including a destination address on the network; and

allocating resources on network devices on a path to the destination address to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.

2. The method of claim 1, further comprising determining if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.

3. The method of claim 2, further comprising:

constructing a map of a topology of the network; and

storing the map in memory;

wherein determining and allocating are performed by referencing the map.

4. The method of claim 3, wherein constructing is performed periodically to account for changes in the topology of the network.

5. The method of claim 1, further comprising:

determining if the reservation is permitted based on an identity of a transferor;

wherein allocating is performed if it is determined that the reservation is permitted.

6. The method of claim 5, wherein allocating is not performed if it is determined that the reservation is not permitted.

7. The method of claim 1, wherein allocating comprises installing filters on the network devices to allocate the resources.

8. The method of claim 7, further comprising receiving data indicating a time that the resources are to be activated;

wherein the filters are installed at the time that the resources are to be activated.

9. The method of claim 1, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.

10. The method of claim 9, wherein the different classes of service are defined in data packets to be transmitted over the network.

11. The method of claim 1, wherein the resources comprise bandwidth of devices on the network.

12. The method of claim 1, further comprising determining if the destination address is along a path having greater than a predetermined amount of bandwidth;

wherein allocating is performed based on the determining.

13. The method of claim 1, wherein allocating comprises communicating with the network devices.

14. The method of claim 13, wherein communicating takes place using the COPS/RSVP protocol.

15. A computer program stored on a computer-readable medium for allocating resources on a network, the computer program comprising instructions that cause a computer to:

receive a request for reservation of network resources, the reservation including a destination address on the network; and

allocate resources on network devices on a path to the destination address to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.

16. The computer program of claim 15, further comprising instructions that cause the computer to determine if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.

17. The computer program of claim 16, further comprising instructions that cause the computer to:

construct a map of a topology of the network; and

store the map in memory;

wherein determining and allocating are performed by referencing the map.

18. The computer program of claim 17, wherein constructing is performed periodically to account for changes in the topology of the network.

19. The computer program of claim 15, further comprising instructions that cause the computer to:

determine if the reservation is permitted based on an identity of a transferor;

wherein allocating is performed if it is determined that the reservation is permitted.

20. The computer program of claim 19, wherein allocating is not performed if it is determined that the reservation is not permitted.

21. The computer program of claim 15, wherein allocating comprises installing filters on the network devices to allocate the resources.

22. The computer program of claim 21, further comprising instructions that cause the computer to receive data indicating a time that the resources are to be activated;

wherein the filters are installed at the time that the resources are to be activated.

23. The computer program of claim 15, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.

24. The computer program of claim 23, wherein the different classes of service are defined in data packets to be transmitted over the network.

25. The computer program of claim 15, wherein the resources comprise bandwidth of devices on the network.

26. The computer program of claim 15, further comprising instructions that cause the computer to determine if the destination address is along a path having greater than a predetermined amount of bandwidth;

wherein allocating is performed based on the determining.

27. The computer program of claim 15, wherein allocating comprises communicating with the network devices.

28. The computer program of claim 27, wherein communicating takes place using the COPS/RSVP protocol.

29. An apparatus for allocating resources on a network, the apparatus comprising:

a memory which stores executable instructions; and

a processor which executes the instructions to:

receive a request for reservation of network resources, the reservation including a destination address on the network; and

allocate resources on network devices on a path to the destination address to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.

30. The apparatus of claim 29, wherein the processor executes instructions to determine if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.

31. The apparatus of claim 30, wherein the processor executes instructions to:

construct a map of a topology of the network; and

store the map in memory;

wherein determining and allocating are performed by referencing the map.

32. The apparatus of claim 31, wherein constructing is performed periodically to account for changes in the topology of the network.

33. The apparatus of claim 29, wherein:

the processor executes instructions to determine if the reservation is permitted based on an identity of a transferor; and

allocating is performed if it is determined that the reservation is permitted.

34. The apparatus of claim 33, wherein allocating is not performed if it is determined that the reservation is not permitted.

35. The apparatus of claim 29, wherein allocating comprises installing filters on the network devices to allocate the resources.

36. The apparatus of claim 35, wherein:

the processor executes instructions to receive data indicating a time that the resources are to be activated; and

the filters are installed at the time that the resources are to be activated.

37. The apparatus of claim 29, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.

38. The apparatus of claim 37, wherein the different classes of service are defined in data packets to be transmitted over the network.

39. The apparatus of claim 29, wherein the resources comprise bandwidth of devices on the network.

40. The apparatus of claim 29, wherein:

the processor executes instructions to determine if the destination address is along a path having greater than a predetermined amount of bandwidth; and

allocating is performed based on a determination made by the processor.

41. The apparatus of claim 29, wherein allocating comprises communicating with the network devices.

42. The apparatus of claim 29, wherein communicating takes place using the COPS/RSVP protocol.

43. An apparatus for allocating resources on a network, comprising:

means for receiving a request for reservation of network resources, the reservation including a destination address on the network; and

means for allocating resources on network devices on a path to the destination address to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.